

NATURAL STONE UNDERGROUND MINING IN SLOVENIA STABILITY ASSESSMENT LOW WITH-TO-HEIGHT RATIOS PILLARS

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ABSTRACT

In the world, underground mining of natural stone has been known for a long time. Natural stone was mined underground already by the ancient Romans. In Slovenia, underground mining of natural stone began to be introduced in 1993 at the Marmor Hotavlje Hotavlje I. coloured limestone quarry. Natural stone is still mined underground at this quarry today and since 2002 also at the Marmor Sežana Lipica II. limestone quarry. In both natural stone quarries, this mining method is dictated primarily by the condition of the quarries, along with an increasing demand for this raw material and the geological structure of the site. In the future, experience acquired in these two quarries will serve for introducing the method of underground mining also at other Slovene natural stone quarries which are suitable for the use of this mining method.

Key words: Stability Assessment, Natural stone, Pillar, Underground Quarry, Marmor Sežana, Lipica II., Marmor Hotavlje, Hotavlje I. .